

Section Heading	Subsection Heading	Contents of Section and Subheadings	Notes
Executive Summary or Summary		One to two-page summary of project location including the 6 th field hydrologic unit code (HUC), proposed action, listed species and critical habitat evaluated, project effects on species and habitat, minimization measures (MMs), and effect determinations.	Keep it brief and concise. The summary should provide a stand alone overview of the project, the potential impacts, the species affected, and the concluding effect determinations. No citations or illustrations should be included.
Table of Contents	List of Tables List of Figures List of Appendices		Make sure page references are correct. Make sure page references are correct. Make sure page references are correct. Make sure all appendices are identified
Introduction		<ul style="list-style-type: none"> ▪ Project proponent ▪ Federal nexus ▪ Project purpose (i.e., congestion relief, safety) ▪ Brief summary of project (a few sentences), expected date and overall timeline. Also identify environmental benefits associated with project. ▪ Consultation activities with the USFWS and NOAA Fisheries, including date of pre-BA meeting if one was attended, and names of the USFWS and NOAA biologists attending 	Be sure to keep the introduction section very brief.
Project Description	Location	<ul style="list-style-type: none"> ▪ Specific project location (milepost begin/end of project, township/range, latitude/longitude, etc.) ▪ Watershed in which project is located, 6th field HUC ▪ Brief description of project setting/vicinity: <ul style="list-style-type: none"> ▪ Surrounding land use ▪ Wetlands ▪ Geology and Soils ▪ Vegetation 	Include vicinity map. Additional maps or aerial photographs as needed to illustrate resource or project characteristics.

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	Construction Activities	<ul style="list-style-type: none">▪ Deconstruction of project into its components▪ Construction activities and types of equipment for each component▪ Detailed project timeline and sequencing addressing each of the components▪ Secondary project features (mitigation sites, staging areas, detours, waste/stockpile areas, etc.) and directly related BMPs	<p>Photos or simple project plans may be inserted in this section, or more detailed figures may be referenced in the appendices.</p> <p>It can be helpful to provide a two column table (Date/Activity) listing each construction step in chronological order. Emphasis should be placed on construction phases/activities that will particularly impact protected species.</p>
	Interrelated and Interdependent Actions	<ul style="list-style-type: none">▪ Detailed description of interrelated and interdependent actions or activities.▪ Use the “but for” test	<p>These actions are considered part of the larger action (action = proposed project + interrelated/interdependent actions).</p>
	Impact Avoidance and Minimization Measures	<ul style="list-style-type: none">▪ Impact avoidance and minimization measures (minimization measures [MMs], best management practices [BMPs], and performance standards) identified for each project component as applicable.	<p>Identify MMs or BMPs that will be implemented for each project component.</p> <p>Compile impact avoidance and minimization measures into a single list or summary, including additional measures that may be identified for specific species.</p> <p>Highlight project features designed to minimize impacts of the project (like build retaining wall here, shifted work to median to avoid wetlands etc.). This can be provided in a list format.</p>
Action Area		<ul style="list-style-type: none">▪ Characterization and description of the physical, chemical and biological impacts of project activities and describe the geographic extent of these activities▪ Definition and delineation of action area	<p>Insert a map or aerial photo with action area identified.</p> <p>Action area can be constructed by overlaying/combining multiple zones of impact associated with project direct and indirect effects. For example, the single action area for the project may be composed of a water quality impact zone, terrestrial noise impacts zone, aquatic noise impact zone, etc.</p> <p>Be sure to have a paragraph that defines the extent of the action area in its entirety as depicted on the map.</p>

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Species and Critical Habitat		<ul style="list-style-type: none"> List of species and habitats addressed in the BA Explanation of why other species on NOAA Fisheries or USFWS lists are not addressed in the BA Species occurrence in the action area, including specific life history stages that occur within the action area Presence or absence of critical habitat in the action area, including specific Primary Constituent Elements (PCEs) within action the action area 	<p>Include a table identifying listed and proposed species/critical habitat addressed in BA and their federal status.</p> <p>Provide detailed information on site-specific species and critical habitat occurrence.</p> <p>Place general information on species and habitat requirements in appendices.</p> <p>Do not include candidate species.</p>
Environmental Baseline		<ul style="list-style-type: none"> Analysis of presence and condition of habitat features as they pertain to the species addressed in the BA (describing applicable baseline conditions only, focusing on elements necessary to complete the analysis of effects) Assessment of key habitat features for each species and for each critical habitat PCE in the action area. <ul style="list-style-type: none"> What function does/should the habitat provide? How well is habitat functioning? (Use matrices for guidance) Presence or absence of suitable habitat for listed and proposed species in the action area For freshwater species – Include NOAA Fisheries or USFWS matrices as appropriate and provide citation. Table should be provided in the body of the BA, summarizing aquatic baseline conditions and anticipated impacts at watershed and project/action area scales For freshwater species – Summary of pathways and indicators that will be affected by the project and for which data are sufficient (provide detailed analyses in BA appendices). 	<p>Photos and maps, which are helpful for federal reviewers, may be inserted in this section.</p> <p>If the project has no aquatic impacts and is isolated from aquatic habitat, provide information on the terrestrial environment only.</p> <p>Only include summary of pathways and indicators that will be affected by project activities within the BA Environmental Baseline section.</p> <p>Use limiting factor analysis, limiting factor reports, aerial photos, field investigations, and consultation with professionals for supporting information.</p>

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Effects of Action		<ul style="list-style-type: none"> ■ For species – Exposure and response analyses <ul style="list-style-type: none"> ■ Determine if exposure is likely <ul style="list-style-type: none"> ■ If exposure likely: <ul style="list-style-type: none"> ■ Assessment of species response to direct effects of the action ■ Assessment of species response to indirect effects of the action ■ For habitat as it relates to the species – <ul style="list-style-type: none"> ■ Analysis of direct and indirect effects to habitat conditions <ul style="list-style-type: none"> ■ Analysis of how species would respond to the affected habitat ■ For critical habitat – Analysis of effects to PCEs and baseline conditions <ul style="list-style-type: none"> ■ Analysis of direct and indirect effects to <u>each</u> PCE in the action area <ul style="list-style-type: none"> ■ Analysis of how action will impact the function of each PCE (long-term, short-term, temporary, permanent, seasonal) ■ Analysis of how species would respond to the affected PCE function. ■ Identification of additional species-specific impact avoidance and minimization measures (MMs), best management practices (BMPs), conservation measures, and performance standards to reduce potential for exposure or to address anticipated response. 	<p>Tie potential effects to compliance with species recovery plans, management plans, and/or habitat conservation plans.</p> <p>Analyze in detail only project impacts that potentially affect listed species and critical habitat.</p> <p>Take into consideration proposed impact minimization measures and BMPs.</p> <p>For marine and terrestrial environments, assessment of project effects on existing environmental conditions that are pertinent to the species. There are no matrices available for these environments, so the biologist must determine what environmental characteristics are pertinent to the analysis.</p> <p>For freshwater aquatic environmental baseline, assessment of effects on the baseline conditions (in NMFS and USFWS matrices) at watershed and/or action area scales. Confine detailed analysis to those indicators that will sustain impacts. Additional analyses can be provided in BA appendices.</p> <p>Additional measures that may be identified for specific species should be compiled into a single list or summary of impact avoidance and minimization measures. This list will be included in the Project Description section of the BA.</p> <p>A table (Impact, MMs/BMPs) may effectively summarize anticipated impacts to protected species or critical habitat and the applicable off-setting mitigation or related minimization measures.</p>

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	Beneficial Effects	<ul style="list-style-type: none"> Summary of effects of the action that are not part of standard mitigation. 	
Cumulative Effects		<ul style="list-style-type: none"> Assessment of cumulative effects within the action area 	Remember this is not the NEPA definition For formal consultations <u>only</u> , not considered when making effect determinations
Effect Determinations		<ul style="list-style-type: none"> Effect determination and summary of rationale (summary of direct and indirect project impacts on species and habitats in a bulleted list format), for each species/critical habitat analyzed <ul style="list-style-type: none"> Listed and proposed species, and/or designated and proposed critical habitat. 	
References	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> List of information resources used in BA preparation 	
Appendices			Appendices must appear in the order they are referred to in the text.
	WSDOT Fish Removal Protocols and Standards	<ul style="list-style-type: none"> Information/reporting outlined in the WSDOT Fish Removal Protocols and Standards 	Include if applicable
	Official Species Lists	<ul style="list-style-type: none"> Current species Lists from USFWS and NOAA Fisheries 	Lists are available on-line on agency websites.
	Biology of Listed Species	<ul style="list-style-type: none"> General information on life history and habitat requirements 	
	Candidate Species Information	<ul style="list-style-type: none"> Occurrence of candidate species in the project action area Analysis of effects Effect determinations 	

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	Essential Fish Habitat (EFH) Assessment	<ul style="list-style-type: none"> ▪ Federal mandate (Magnuson-Stevens Act) ▪ EFH managed species potentially present in project vicinity ▪ Elements of EFH present in project vicinity ▪ Analysis of project impacts, referencing ESA Analysis of Effects section above if necessary ▪ Effect determination for EFH 	Address EFH separately from ESA analysis: entire EFH discussion is in BA appendix, not body of BA.
	Environmental Baseline for Aquatic Habitats	<ul style="list-style-type: none"> ▪ Detailed environmental baseline discussion of the NOAA Fisheries/USFWS indicators and pathways 	